

Continuous Quality Improvement Toolkit

A Resource for Maternal, Infant, and Early Childhood Home Visiting Program Awardees

Module 7 Facilitation Guide: CQI Tools II—Root Cause Analysis Tools

Purpose/Goals: The purpose of this training module is to learn how to conduct root cause analyses, using the 5 Whys, Brainstorming, and Fishbone Diagram tools.

Time: About 50 minutes (20 minutes of content and 35 minutes of activities).

Format: This presentation is intended to be given in person but can also be delivered via webinar if necessary. We recommend that participants sit with their agency team in small groups of four to six per table. Coaches should float between tables and connect with each agency team.

Equipment: An in-person training will require a laptop and projector to deliver this presentation. This training can also be conducted via Webinar, which would require a Webinar service, laptop, and telephone.

Materials:

- PowerPoint slides — The notes section of the PowerPoint slides contains talking points to use during the presentation. A copy of the slides may also be provided to participants.
- *5 Whys* — This handout is a quick, easy-to-use tool to help determine root causes. The notes on Slides 11 and 12 refer to this handout.
- *Fishbone Diagram* — The handout provides information on how to create a Fishbone Diagram to determine root causes and target change strategies to test. A Fishbone Diagram template is provided for participants to capture their ideas. The notes on Slides 18 and 19 refer to this handout.

General Topics Covered:

- Root cause analysis and three root cause analysis tools
- How to analyze findings to determine where to focus CQI efforts

Introduction to PowerPoint Activities and Participation. When the icon below appears, participants will be engaged.



Activity: 5 Whys (Slides 11 and 12)

- **Introduction:** This activity gives participants the opportunity to practice the 5 Whys root cause analysis technique.
- **Time:** About 15 minutes.
- **Instructions:** Pass out the *5 Whys* handout and ask participants to break into agency teams of four to six per table to complete the activity. Review the steps listed on the 5 Whys slide.
 - **Step 1:** Start by identifying a problem for which the root cause is unknown.
 - **Step 2:** Ask the first “why” question.
 - **Step 3:** Go back a step using another why question. Continue to do this until it is no longer possible to think of a response to the last why question.
 - **Step 4:** The last response represents the root cause.
- **Debrief:** After the groups complete the 5 Whys exercise, move to Slide 12 and lead the group through the debrief questions.
 - How many steps did it take to discover the root cause?
 - Did the team have any difficulty coming up with potential responses to the why questions?
 - Did the team gain new insight into the problem? If not, why not?
 - When would this tool be helpful in improvement efforts?

Activity: Fishbone Diagram (Slides 18 and 19)

- **Introduction:** This activity gives participants an opportunity to develop a Fishbone Diagram. Participants will also analyze results to select a potential area for CQI.
- **Time:** About 20 minutes.
- **Instructions:** Pass out the *Fishbone Diagram* handout and ask participants to break into agency teams of four to six per table to complete a group activity. Walk through the steps on Slide 18. It may be helpful to review the components of the fish again (e.g., the problem statement is the fish head, categories are the ribs, etc.). Encourage teams to use the 5 Whys or Brainstorming tools to identify root causes. If teams finish early and have time to consider potential change strategies, suggest they use the Brainstorming technique to do so.
- **Debrief:** After the groups complete the Fishbone Diagram, move to Slide 19 and lead the group through the questions.

- Prior to completing the diagram, what were teams' assumptions concerning the root cause for the stated problem?
- How did assumptions change after completing the diagram?
- How did teams identify the root cause(s) on which to focus?
- How might teams use this process in future CQI work?